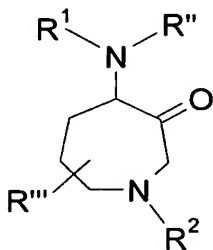


This listing of claims will replace all prior versions, and listings, of claims in the application:

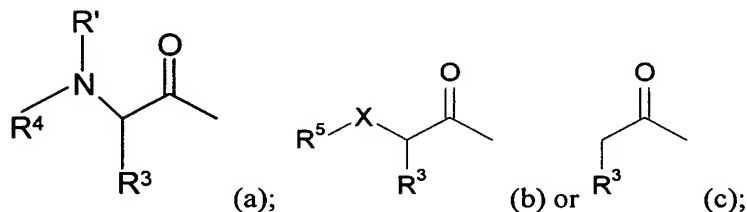
1. (Original) A method for treating a disease by inhibiting cathepsin S comprising administering at least one compound of Formula I neat or in a pharmaceutically acceptable formulation in an effective amount to a mammal in need thereof, wherein Formula I comprises:



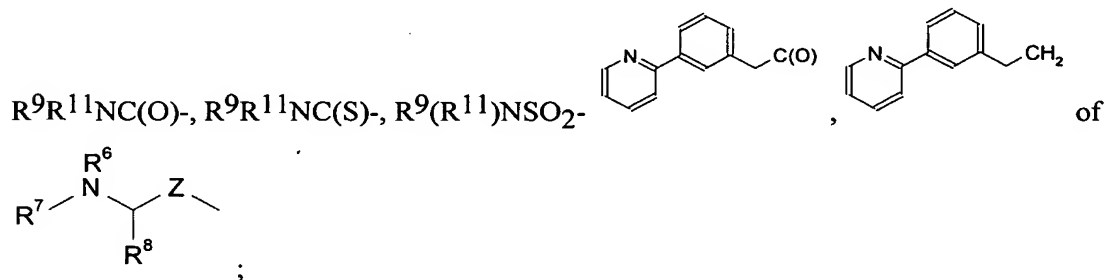
I

wherein:

R¹ is



R² is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R⁹C(O)-, R⁹C(S)-, R⁹SO₂-, R⁹OC(O)-,



R³ is H or substituted or unsubstituted C₁₋₆alkyl, C₃₋₇cycloalkylC₀₋₆alkyl, C₄₋₇cycloalkenylC₀₋₆alkyl, C₅₋₈bicycloalkylC₀₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, HetC₀₋₆alkyl, ArC₀₋₆alkyl, Ar-ArC₀₋₆alkyl, Ar-HetC₀₋₆alkyl, Het-ArC₀₋₆alkyl, or Het-HetC₀₋₆alkyl;

R⁴ is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R⁵C(O)-, R⁵C(S)-, R⁵SO₂-, R⁵NSO₂-, R⁵OC(O)-, R⁵R¹²NC(O)-, or R⁵R¹²NC(S)-;

R⁵ is H, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Ar-ArC₀₋₆alkyl, Ar-HetC₀₋₆alkyl, Het-ArC₀₋₆alkyl, Het-HetC₀₋₆alkyl, or Het-C₀₋₆alkyl;

R⁶ is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R⁷ is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R¹⁰C(O)-, R¹⁰C(S)-, R¹⁰SO₂-, R¹⁰OC(O)-, R¹⁰R¹³NC(O)-, or R¹⁰R¹³NC(S)-;

R⁸ is H, C₁₋₆alkyl, C₂₋₆alkenyl, C₂₋₆alkynyl, HetC₀₋₆alkyl or ArC₀₋₆alkyl;

R⁹ is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl or Het-C₀₋₆alkyl;

R¹⁰ is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl or Het-C₀₋₆alkyl;

R¹¹ is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R¹² is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R¹³ is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R' is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

R'' is H, C₁₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

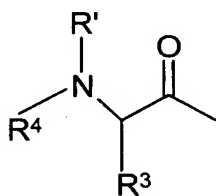
R''' is C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, or Het-C₀₋₆alkyl;

X is CH₂, S, or O;

Z is C(O) or CH₂; or

a pharmaceutically acceptable salt, hydrate or solvate thereof.

2. (Currently Amended) The method of claim 1 wherein, in Formula I:



R¹ is (a);

R² is R⁹SO₂ R⁹OC(O)-, or R⁹C(O)-;

R³ is C₅₋₇cycloalkylC₁₋₂alkyl, C₄₋₅cycloalkenylC₁₋₂alkyl, C₅₋₈bicycloalkylC₁₋₂alkyl or Ar-HetC₀₋₆alkyl;

R⁴ is R⁵C(O)-, or R⁵SO₂-;

R⁵ is unsubstituted or substituted furanyl, tetrahydrofuranyl, morpholinyl, pyrrolyl, piperazinyl, pyrazolyl, isoxazolyl, thiazolyl, pyrazolyl, pyrazolo[5,1-c]pyrimidinyl, triazolyl, pyrazinyl, imadazolyl, benzofuranyl, thiophenyl, furo[3,2-b]-pyridine-2-yl, phenyl, pyridinyl, thieno[3,2-b]thiophenyl, or unsubstituted or C₁₋₂alkylsubstituted pyrazolo[5,1-c]triazinyl;

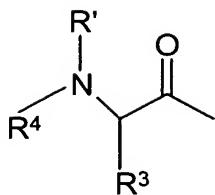
R⁹ is HetC₀₋₆alkyl, ArC₀₋₆alkyl, or C₁₋₆alkyl;

R' is H, C₁₋₆alkyl;

R'' is H or C₁₋₆alkyl; and

R''' is C₁₋₆alkyl.

3. (Currently Amended) The method of claim 1 or 2 wherein in Formula I,



R¹ is (a)

R² is R⁹SO₂ R⁹OC(O)-, or R⁹C(O)-;

R³ is cyclopentylmethyl, cyclopentylethyl, cyclopentenylmethyl, cyclopentenylethyl, cyclohexylmethyl, 4-methylcyclohexylmethyl, 2-cyclohexylprop-1-yl, cyclohexylethyl, cycloheptylmethyl, 7,7-dimethylbicyclo[2.2.1]hept-1-ylmethyl, or indol-2-ylmethyl;

R⁴ is R⁵C(O)- or R⁵SO₂-

R⁵ is furan-2-yl, furan-3-yl, 2-methylfuran-3-yl, 2,4-dimethylfuran-3-yl, 5-phenylfuran-2-yl, 5-(2-chlorophenyl)furan-2-yl, 5-(3-chlorophenyl)furan-2-yl, 5-(4-chlorophenyl)furan-2-yl, 5-(4-fluorophenyl)furan-2-yl, 5-(4-hydroxyphenyl)furan-2-yl, 5-(3-trifluoromethylphenyl)furan-2-yl, 5-(4-trifluoromethylphenyl)furan-2-yl, 5-(3-trifluoromethylphenyl)furan-2-yl, 5-(4-methylphenyl)furan-2-yl, 5-(4-acetylphenyl)furan-2-yl, or 5-trifluoromethylfuran-2-yl;

tetrahydrofuran-2-yl or tetrahydrofuran-3-yl

N-morpholinyl;

pyrrol-2-yl;

piperzin-1-yl or 4-methylpiperzin-1-yl;

1H-pyrazol-2-yl, 1H-pyrazol-4-yl, 1-methyl-2H-pyrazol-2-yl, 2-methyl-2H-pyrazol-2-yl, 1-methyl-2H-pyrazol-3-yl or 2-methyl-2H-pyrazol-3-yl;

isoxazol-5-yl, 3-methylisoxazol-4-yl, 5-methylisoxazol-3-yl, 5-methylisoxazol-4-yl, or 3,5-dimethylisoxazol-4-yl;

thiazol-2-yl, 2-methylthiazol-2-yl, 2,4-dimethylthiazol-5-yl, 2-(2,3-dihydrobenzo[1,4]dioxin-2-yl)thiazol-4-yl, or 4-methyl-2-phenylthiazol-5-yl;

4,7-dimethylpyrazolo[5,1-c]triazin-3-yl;

2-methyl-2H-pyrazol-2-yl;

2,7-dimethylpyrazolo[5,1-c]pyrimidin-6-yl;

3-phenyl-3H-[1,2,3]triazol-3-yl;

pyrazin-2-yl or 5-methylpyrazin-2-yl;

1-H-imidazol-2-yl, 1-methyl-1H-imidazol-4-yl or 1-methyl-1H-imidazol-2-yl;

benzofuran-2-yl, 5,6-dimethoxybenzofuran-2-yl, or 5-(2-morpholin-4-yl-ethoxy)benzofuran-2-yl;

thiophene-3-yl, or thiophen-2-yl, 5-pyridin-2-ylthiophen-2-yl, 5-methylthiophenyl 3-methylthiophen-2-yl; or 3-ethoxythiophen-2-yl;

furo[3,2-b]-pyridine-2-yl or 3-methylfuro[3,2-b]pyridine-2-yl;

phenyl, 4-methylphenyl, 3-chlorophenyl, 4-chlorophenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 2-chlorophenyl, 4-fluorophenyl, 4-hydroxyphenyl, or 4-acetylphenyl;

pyridin-2-yl; or

thieno[3,2-b]thiophen-2-yl or 5-isoxazol-3-ylthiophen-2-yl;

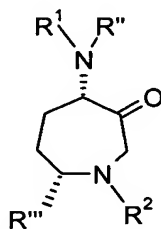
R⁹ is pyridin-2-yl, 1-oxypyridin-2-yl, phenyl, furan-2-yl or methyl;

R' is H;

R'' is H or C₁₋₆alkyl; and

R''' is methyl.

4. (Currently Amended) The method according to ~~any one of claims 1-3~~ claim 1 wherein Formula I has the structure:



and groups R¹ - R¹³, X, Z, R', R'' and R''' are the same as defined in ~~any one of claims 1-4~~ claim 1.

5. (Original) The method according to claim 1 wherein the compound of Formula I is
morpholine 4-carboxylic acid {(S)-2-[1-methylcyclopentyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
morpholine 4-carboxylic acid {(L)-2-[1-methylcyclopentyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
morpholine 4-carboxylic acid {(S)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
morpholine 4-carboxylic acid {(L)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
furan-carboxylic acid {(S)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
furan-carboxylic acid {(L)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
furan-carboxylic acid {(S)-2-[4-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;
furan-carboxylic acid {(S)-2-[homocyclopentyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

morpholine 4-carboxylic acid {(S)-2-[homocyclopentyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

furan-carboxylic acid {(S)-2-[cycloheptyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

morpholine 4-carboxylic acid {(S)-2-[cycloheptyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

furan-carboxylic acid {(S)-2-[cyclopentenyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

furan-carboxylic acid {(S)-2-[tryptophanyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

morpholine 4-carboxylic acid {(S)-2-(7,7-dimethyl-bicyclo[2.2.1]hepty-1-yl)-1-[(4S,7R)-7-methyl-3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-2H-pyrazole-3-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

1H-pyrazole-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

1-methyl-1H-pyrrole-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

isoxazole-5-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

thiazole-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-trifluoromethyl-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

1H-pyrazole-4-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

tetrahydrofuran-3-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

4,7-dimethyl-pyrazolo[5,1-c][1,2,4]triazine-3-carboxylic acid {(S)-2-cyclopentyl-1-[(4S,7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2,7-dimethyl-pyrazolo[5,1-a]pyrimidine-6-carboxylic acid {(S)-2-cyclopentyl-1-[(4S,7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

3-phenyl-3H-[1,2,3]triazole-4-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-(2,3-dihydro-benzo[1,4]dioxin-2-yl)-thiazole-4-carboxylic acid {(S)-2-cyclopentyl-1-[(4S,7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide

N-[(S)-2-cyclopentyl-1-[(4S,7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl]-2-pyrazol-1-yl-benzamide;

4-methyl-2-phenyl-thiazole-5-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(4-chloro-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(3-trifluoromethyl-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(2-chloro-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(4-fluoro-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(4-methoxy-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-phenyl-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(4-trifluoromethyl-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(3-chloro-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(4-methylphenyl)furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-(4-acetyl-phenyl)-furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

4-methyl-piperazine-1-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

piperazine-1-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

morpholine 4-carboxylic acid {(S)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-meyhanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

morpholine 4-carboxylic acid {(L)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-methanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-thiazole-4-carboxylic acid {(S)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-meyhanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-thiazole-4-carboxylic acid {(L)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-methanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

morpholine 4-carboxylic acid {(S)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-meyhanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

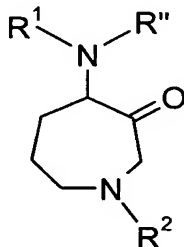
morpholine 4-carboxylic acid {(L)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-methanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-thiazole-4-carboxylic acid {(S)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-meyhanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-thiazole-4-carboxylic acid {(L)-2-[1-methylcyclohexyl-1-(4S,7R)-7-methyl-3-oxo-1-(1-pyridin-2-yl-methanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide; or a pharmaceutically acceptable salt, hydrate or solvate thereof.

6. (Original) The method of claim 1 wherein the inhibition of cathepsin S effects treatment or prevention of an autoimmune disease; treatment or prevention of a disease caused by the formation of atherosclerotic lesions and complications arising therefrom; and diseases requiring inhibition, for therapy, of a class II MHC-restricted immune response, inhibition of an asthmatic response, inhibition of an allergic response, inhibition of immune response against a transplanted organ or tissue, or inhibition of elastase activity in atheroma.

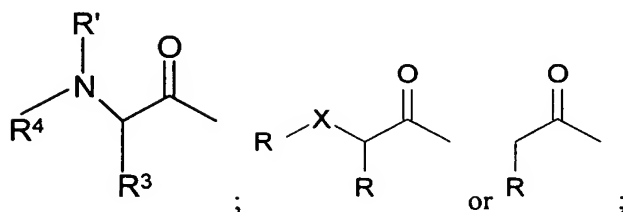
7. (Original) A compound of Formula II



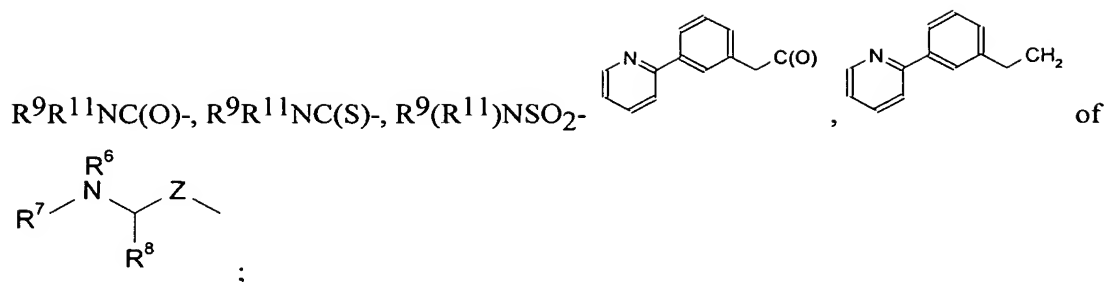
II

wherein:

R¹ is:



R² is H, C₁₋₆alkyl, C₃₋₆cycloalkyl-C₀₋₆alkyl, Ar-C₀₋₆alkyl, Het-C₀₋₆alkyl, R⁹C(O)-, R⁹C(S)-, R⁹SO₂-, R⁹OC(O)-,



R^3 is H or substituted or unsubstituted C_{1-6} alkyl, C_{3-7} cycloalkyl- C_{0-6} alkyl, C_{4-7} cycloalkenyl- C_{0-6} alkyl, C_{5-8} bicycloalkyl- C_{0-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, Het- C_{0-6} alkyl, Ar- C_{0-6} alkyl, Ar-Ar- C_{0-6} alkyl, Ar-Het- C_{0-6} alkyl, Het-Ar- C_{0-6} alkyl, or Het-Het- C_{0-6} alkyl;

R^4 is H, C_{1-6} alkyl, C_{3-6} cycloalkyl- C_{0-6} alkyl, Ar- C_{0-6} alkyl, Het- C_{0-6} alkyl, $R^5C(O)-$, $R^5C(S)-$, R^5SO_2- , R^5NSO_2- , $R^5OC(O)-$, $R^5R^{12}NC(O)-$, or $R^5R^{12}NC(S)-$;

R^5 is H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, C_{3-6} cycloalkyl- C_{0-6} alkyl, Ar- C_{0-6} alkyl, Ar-Ar- C_{0-6} alkyl, Ar-Het- C_{0-6} alkyl, Het-Ar- C_{0-6} alkyl, Het-Het- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

R^6 is H, C_{1-6} alkyl, C_{3-6} cycloalkyl- C_{0-6} alkyl, Ar- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

R^7 is H, C_{1-6} alkyl, C_{3-6} cycloalkyl- C_{0-6} alkyl, Ar- C_{0-6} alkyl, Het- C_{0-6} alkyl, $R^{10}C(O)-$, $R^{10}C(S)-$, $R^{10}SO_2-$, $R^{10}OC(O)-$, $R^{10}R^{13}NC(O)-$, or $R^{10}R^{13}NC(S)-$;

R^8 is H, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, Het- C_{0-6} alkyl or Ar- C_{0-6} alkyl;

R^9 is C_{1-6} alkyl, C_{3-6} cycloalkyl- C_{0-6} alkyl, Ar- C_{0-6} alkyl or Het- C_{0-6} alkyl;

R^{10} is C_{1-6} alkyl, C_{3-6} cycloalkyl- C_{0-6} alkyl, Ar- C_{0-6} alkyl or Het- C_{0-6} alkyl;

R^{11} is H, C_{1-6} alkyl, Ar- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

R^{12} is H, C_{1-6} alkyl, Ar- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

R^{13} is H, C_{1-6} alkyl, Ar- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

R' is H, C_{1-6} alkyl, Ar- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

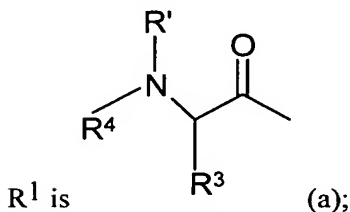
R'' is C_{1-6} alkyl, Ar- C_{0-6} alkyl, or Het- C_{0-6} alkyl;

X is CH_2 , S, or O;

Z is $C(O)$ or CH_2 ; or

a pharmaceutically acceptable salt, hydrate or solvate thereof.

8. (Original) A compound of Formula I according to claim 7 wherein:



R^2 is R^9SO_2 , $R^9OC(O)-$, $R^9C(O)-$ or C_{1-6} alkyl;

R^3 is C_{5-7} cycloalkyl C_{1-2} alkyl, C_{4-5} cycloalkenyl C_{1-2} alkyl, C_{5-8} bicycloalkyl C_{1-2} alkyl or Ar-Het C_{0-6} alkyl;

R^4 is $R^5C(O)-$, or R^5SO_2- ;

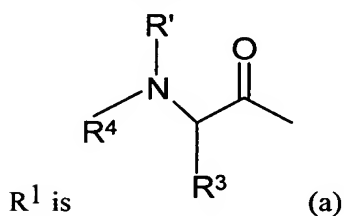
R^5 is unsubstituted or substituted furanyl, tetrahydrofuranyl, morpholinyl, pyrrolyl, piperazinyl, pyrazolyl, isoxazolyl, thiazolyl, pyrazolyl, pyrazolo[5,1-c]pyrimidinyl, triazolyl, pyrazinyl, imadazolyl, benzofuranyl, thiophenyl, furo[3,2-b]-pyridine-2-yl, phenyl, pyridinyl, thieno[3,2-b]thiophenyl, or unsubstituted or C_{1-2} alkylsubstituted pyrazolo[5,1-c]triazinyl;

R^9 is Het- C_{0-6} alkyl, Ar C_{0-6} alkyl or C_{1-6} alkyl;

R' is H, C_{1-6} alkyl; and

R'' is H or C_{1-6} alkyl.

9 (Original) A compound of Formula II according to claim 8 wherein:



R^1 is

R^2 is R^9SO_2 , $R^9OC(O)-$, or $R^9C(O)-$;

R^3 is cyclopentylmethyl, cyclopentylethyl, cyclopentenylmethyl, cyclopentenylethyl, cyclohexylmethyl, 4-methylcyclohexylmethyl, 2-cyclohexylprop-1-yl, cyclohexylethyl, cycloheptylmethyl, 7,7-dimethylbicyclo[2.2.1]hept-1-ylmethyl, or indol-2-ylmethyl;

R^4 is $R^5C(O)-$ or R^5SO_2-

R^5 is furan-2-yl, furan-3-yl, 2-methylfuran-3-yl, 2,4-dimethylfuran-3-yl, 5-phenylfuran-2-yl, 5-(2-chlorophenyl)furan-2-yl, 5-(3-chlorophenyl)furan-2-yl, 5-(4-chlorophenyl)furan-2-yl, 5-(4-fluorophenyl)furan-2-yl, 5-(4-hydroxyphenyl)furan-2-yl, 5-(3-trifluoromethylphenyl)furan-2-yl, 5-(4-trifluoromethylphenyl)furan-2-yl, 5-(3-trifluoromethylphenyl)furan-2-yl, 5-(4-methylphenyl)furan-2-yl, 5-(4-acetylphenyl)furan-2-yl, or 5-trifluoromethylfuran-2-yl;

tetrahydrofuran-2-yl or tetrahydrofuran-3-yl

N-morpholinyl;

pyrrol-2-yl;

piperzin-1-yl or 4-methylpiperzin-1-yl;

1H-pyrazol-2-yl, 1H-pyrazol-4-yl, 1-methyl-2H-pyrazol-2-yl, 2-methyl-2H-pyrazol-2-yl, 1-methyl-2H-pyrazol-3-yl or 2-methyl-2H-pyrazol-3-yl;

isoxazol-5-yl, 3-methylisoxazol-4-yl, 5-methylisoxazol-3-yl, 5-methylisoxazol-4-yl, or 3,5-dimethylisoxazol-4-yl;

thiazol-2-yl, 2-methylthiazol-2-yl, 2,4-dimethylthiazol-5-yl, 2-(2,3-dihydrobenzo[1,4]dioxin-2-yl)thiazol-4-yl, or 4-methyl-2-phenylthiazol-5-yl;

4,7-dimethylpyrazolo[5,1-c]triazin-3-yl;

2-methyl-2H-pyrazol-2-yl;
 2,7-dimethylpyrazol[5,1-c]pyrimidin-6-yl;
 3-phenyl-3H-{1,2,3}triazol-3-yl;
 pyrazin-2-yl or 5-methylpyrazin-2-yl;
 1-H-imidazol-2-yl, 1-methyl-1H-imidazol-4-yl or 1-methyl-1H-imidazol-2-yl;
 benzofuran-2-yl, 5,6-dimethoxybenzofuran-2-yl, or 5-(2-morpholin-4-yl-ethoxy)benzofuran-2-yl;
 thiophene-3-yl, or thiophen-2-yl, 5-pyridin-2-ylthiophen-2-yl, 5-methylthiophenyl 3-methylthiophen-2-yl; or 3-ethoxythiophen-2-yl;
 furo[3,2-b]-pyridine-2-yl or 3-methylfuro[3,2-b]pyridin-2-yl;
 phenyl, 4-methylphenyl, 3-chlorophenyl, 4-chlorophenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 2-chlorophenyl, 4-fluorophenyl, 4-hydroxyphenyl, or 4-acetylphenyl;
 pyridin-2-yl; or
 thieno[3,2-b]thiophen-2-yl or 5-isoxazol-3-ylthiophen-2-yl;
 R⁹ is pyridin-2-yl, phenyl, furan-2-yl or methyl;
 R' is H; and
 R" is H or C₁₋₆alkyl.

10. (Currently Amended) A compound of Formula II according to ~~any one of claims 7-9~~ claim 7 wherein:

furan-2-carboxylic acid {(S)-2-homocyclohexyl-1-[3-oxo-1-(1-oxy-pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

furan-2-carboxylic acid {(S)-2-tryptophanyl-1-[3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-trifluoromethyl-furan-2-carboxylic acid {(S)-2-cyclohexyl-1-[(s)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2,4-dimethyl-thiazole-5-carboxylic acid {(S)-2-cyclohexyl-1-[(s)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-methyl-pyrazine-2-carboxylic acid {(S)-2-cyclohexyl-1-[(s)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

1-methyl-1H-imidazole-2-carboxylic acid {(S)-2-cyclohexyl-1-[(s)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

1H-pyrazole-4-carboxylic acid {(S)-2-cyclohexyl-1-[(s)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

4-methyl-2-phenyl-thiazole-5-carboxylic acid {(S)-2-cyclohexyl-1-[(s)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2,5-dimethyl-furan-3-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-furan-3-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

isoxazole-5-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-methyl-isoxazole-3-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

5-methyl-isoxazole-4-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

3-methyl-isoxazole-4-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-2H-pyrazole-3-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

pyrazine-2-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

thiazole-2-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

2-methyl-thiazole-4-carboxylic acid {(S)-2-cyclohexyl-1-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide;

(S)-3-cyclohexyl-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-2-(thiophene-2-sulfonylamino)-propionamide;

(S)-3-cyclohexyl-2-(1-methyl-1H-imidazole-4-sulfonylamino)-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-propionamide;

(S)-3-cyclohexyl-2-(3,5-dimethyl-isoxazole-4-sulfonylamino)-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-propionamide;

(S)-3-cyclohexyl-2-(furan-2-sulfonylamino)-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-propionamide;

(S)-3-cyclohexyl-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-2-(pyridine-2-sulfonylamino)-propionamide;

(S)-3-cyclohexyl-2-(morpholine-4-sulfonylamino)-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-propionamide;

(S)-3-cyclohexyl-2-(5-isoxazol-3-yl-thiophene-2-sulfonylamino)-N-[(S)-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-yl]-propionamide;

4-[(S)-3-cyclopentyl-2-[(1-furan-2-yl-methanoyl)-amino]-propanoylamino]-3-oxo-azepane-1-carboxylic acid benzyl ester;

furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]ethyl}-amide;

furan-2-carboxylic acid [(S)-2-cyclopentyl-1-(1-methanesulfonyl-3-oxo-azepan-4-ylcarbamoyl)-ethyl]-amide;

furan-2-carboxylic acid [(S)-1-(1-benzenesulfonyl-3-oxo-azepan-4-ylcarbamoyl)-2-cyclopentyl-ethyl]-amide

furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[1-(1-furan-2-yl-methanoyl)-3-oxo-azepan-4-ylcarbamoyl]-ethyl}-amide;

furan-2-carboxylic acid {(S)-2-cyclopentyl-1-[3-oxo-1-(1-phenyl-methanoyl)-azepan-4-ylcarbamoyl]-ethyl}-amide; or

piperazine-1-carboxylic acid {(S)-2-cyclopentyl-1-[(4S, 7R)-7-methyl-3-oxo-1-(pyridine-2-sulfonyl)-azepan-4-ylcarbamoyl]-ethyl}-amide; or

a pharmaceutically acceptable salt, hydrate or solvate thereof.